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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,650	06/01/2006	Dennis Cutillo	2004P08304WOUS	3958
29177	7590	03/03/2009	EXAMINER	
K&L Gates LLP			TRAN, DZUNG D	
P.O. BOX 1135			ART UNIT	
CHICAGO, IL 60690			PAPER NUMBER	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/581,650	<b>Applicant(s)</b> CUTILLO ET AL.	
	<b>Examiner</b> Dzung D. Tran	<b>Art Unit</b> 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-14 and 16-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-10, 13, 14 and 16-22 is/are rejected.
- 7) ☒ Claim(s) 5-6, 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 7-8, 13, 17-20 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Sharma US 2003/0037095.

Regarding claim 1, Sharma discloses a method for managing a network providing data services to a subscriber, wherein the network comprises an OLT and an ONU connected to the OLT via a passive optical network (paragraph 0018), wherein the ONU is connected to the subscriber through an xDSL connection (paragraph 0024), the method comprising:

providing a plurality of managed entities for managing the ONU, wherein the plurality of managed entities further comprise ADSL managed entities for managing an ADSL connection between the ONU and the subscriber (Figures 2 and 3 shown ADSL module 137 connect between the ONU that connect to fiber 105 and xDSL cable 112 that connect to subscriber), and VDSL managed entities for managing a VDSL connection between the ONU and the subscriber (Figures 2 and 3 shown VDSL

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module 140 connect between the ONU that connect to fiber 105 and xDSL cable 112 that connect to subscriber) and managing the network through one or more of the plurality of managed entities (i.e., ADSL managed entities and VDSL managed entities) and communicating data and network management information between the OLT and the ONU in response to the managed entities.

Regarding claim 2, Sharma discloses wherein the step of communicating the data and the network management information further comprises communicating the data and the network management information over the passive optical network (i.e., by system control module 136 that connect to NMS).

Regarding claims 3 and 4, Sharma discloses wherein each one of the plurality of managed entities further comprises one or more network attributes, each network attribute associated with a network feature and wherein network attributes associated with related network features are included within a single managed entity (i.e., paragraph 0052 discloses the sub-channel such as management channel carries the provisioning information, status information, statistical information and other management information that transmit from NMS to each system controller 136).

Regarding claims 7 and 8, Sharma discloses wherein network attributes define operational parameters of one or more of the OLT, the ONU, the passive optical network, the ADSL connection and the VDSL connection, and wherein network attributes associated with related network features are included within a single managed entity (Figures 2, 3

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shown the ADSL module 137 and VDSL module 140 connect to NMS through the system controller 136).

Regarding claim 13, Sharma discloses wherein the data services comprise telephone service, Internet data service, multimedia services and video services (paragraph 0022).

Regarding claim 17, Sharma discloses comprising creating a plurality of managed entities when an xDSL connection is activated (i.e., figures 2, 3 shown ADSL, VDSL, HDSL managed entities).

Regarding claim 18, Sharma discloses wherein each managed entity comprises one or more of a relationships element, an attributes element, an actions element and a notifications element (i.e., each ADSL, VDSL, HDSL managed entities received the control signal from MNS through system controller 136).

Regarding claim 19, Sharma discloses wherein the notifications element further comprises alarms, test results and attribute value changes (i.e., paragraph 0052 discloses the sub-channel such as management channel carries the provisioning information, status information, it is inherently that the status information comprises alarms, test results and attribute value changes).

Regarding claim 20, Sharma discloses wherein each one of the plurality of managed entities comprises network attributes, and wherein certain related network attributes are included in one managed entity and certain other related network attributes are included in at least two managed entities (Figures 2, 3 shown the ADSL

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module 137 and VDSL module 140 connect to NMS through the system controller 136).

Regarding claim 22, Sharma discloses a plurality of subscribers and a plurality of ONU's, wherein each one of the plurality of ONU's is connected to subscribers through the xDSL connection, and wherein the step of communicating further comprises communicating data and network management information between the OLT and the plurality of ONU's in response to the managed entities (Figures 2, 3, paragraphs 0018, 0051; Figures 2 and 3 shown ADSL module 137 connect between the ONU that connect to fiber 105 and xDSL cable 112 that connect to subscriber).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 9, 10, 12, 14, 16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma US 2003/0037095.

Regarding claim 10, Sharma does not specifically disclose wherein each managed entity is represented by a fixed number of data bytes. However, Sharma discloses paragraph 0052 discloses the sub-channel such as management channel carries the provisioning information, status information, statistical information and other management information. Since it well known in the art that the data bytes is present

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the provisioning information, status information, statistical information in the management channel. Thus it would have been obvious to an artisan that each managed entity is represented by a fixed number of data bytes.

Regarding claim 9, Sharma discloses paragraph 0052 discloses the sub-channel such as management channel carries the provisioning information, status information, statistical information and other management information. Thus, it would have been obvious to an artisan that the other management information can be related to one or more of an ADSL line configuration profile, ADSL line inventory and status data and physical path termination point ADSL UNI.

Regarding claim 14, Examiner takes an official notice that the passive optical network comprises a broadband passive optical network or a gigabit passive optical network is well known in the art.

Regarding claim 16, Sharma discloses paragraph 0052 discloses the sub-channel such as management channel carries the provisioning information, status information, statistical information and other management information. Thus, it would have been obvious to an artisan that the other management information can be network management requests from a network management system, wherein the step of managing the network is responsive to the network management requests.

Regarding claim 21, Sharma discloses paragraph 0052 discloses the sub-channel such as management channel carries the provisioning information, status information, statistical information and other management information. Thus, it would have been obvious to an artisan that the plurality of managed entities further comprise

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required managed entities and optional managed entities (i.e., one of the provisioning information, status information, statistical information and other management information can be an optional managed entities).

5. Claims 5, 6 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Kang U.S. Publication no. 5,831,752. Channel changing method in digital broadcasting service

b. Lim et al. U.S. Publication no. 2004/0031053. Method for providing HDTV level multimedia service

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung D Tran whose telephone number is (571) 272-3025. The examiner can normally be reached on 9:00 AM - 7:00 PM.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dzung Tran

03/01/2009

/Dzung D Tran/

Primary Examiner, Art Unit 2613